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WATER SUPPLY OUTLOOK FOR UTAH



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**UTAH STATE DEPARTMENT OF NATURAL RESOURCES
-- DIVISION OF WATER RIGHTS**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
FEB. 1, 1978

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR UTAH

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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In Cooperation with

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Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS

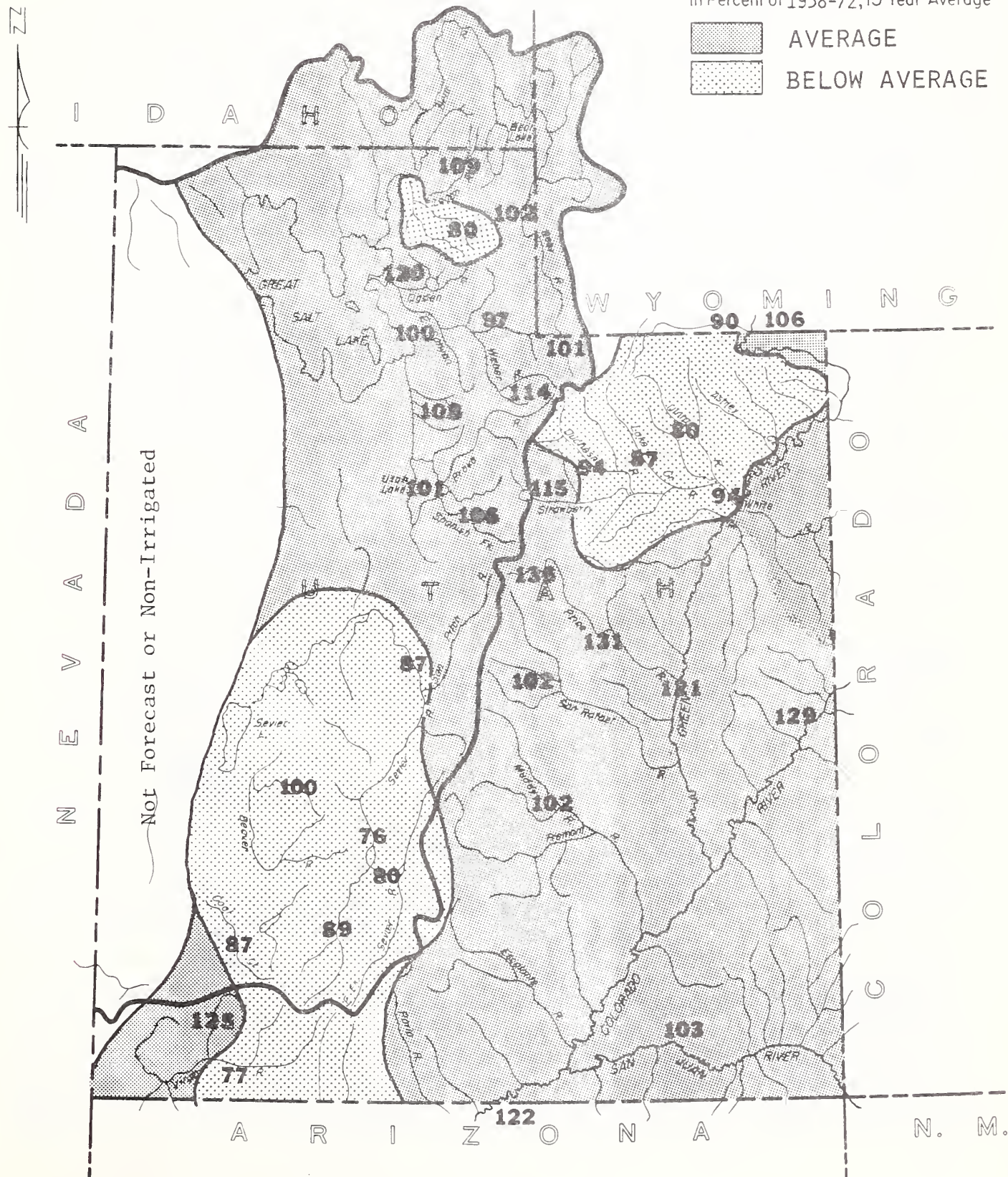
FEBRUARY 1, 1978

Approximate Date



 AVERAGE

 BELOW AVERAGE



SNOW COVER

Based on Snow Surveys Made on
UTAH and BEAR RIVER WATERSHEDS

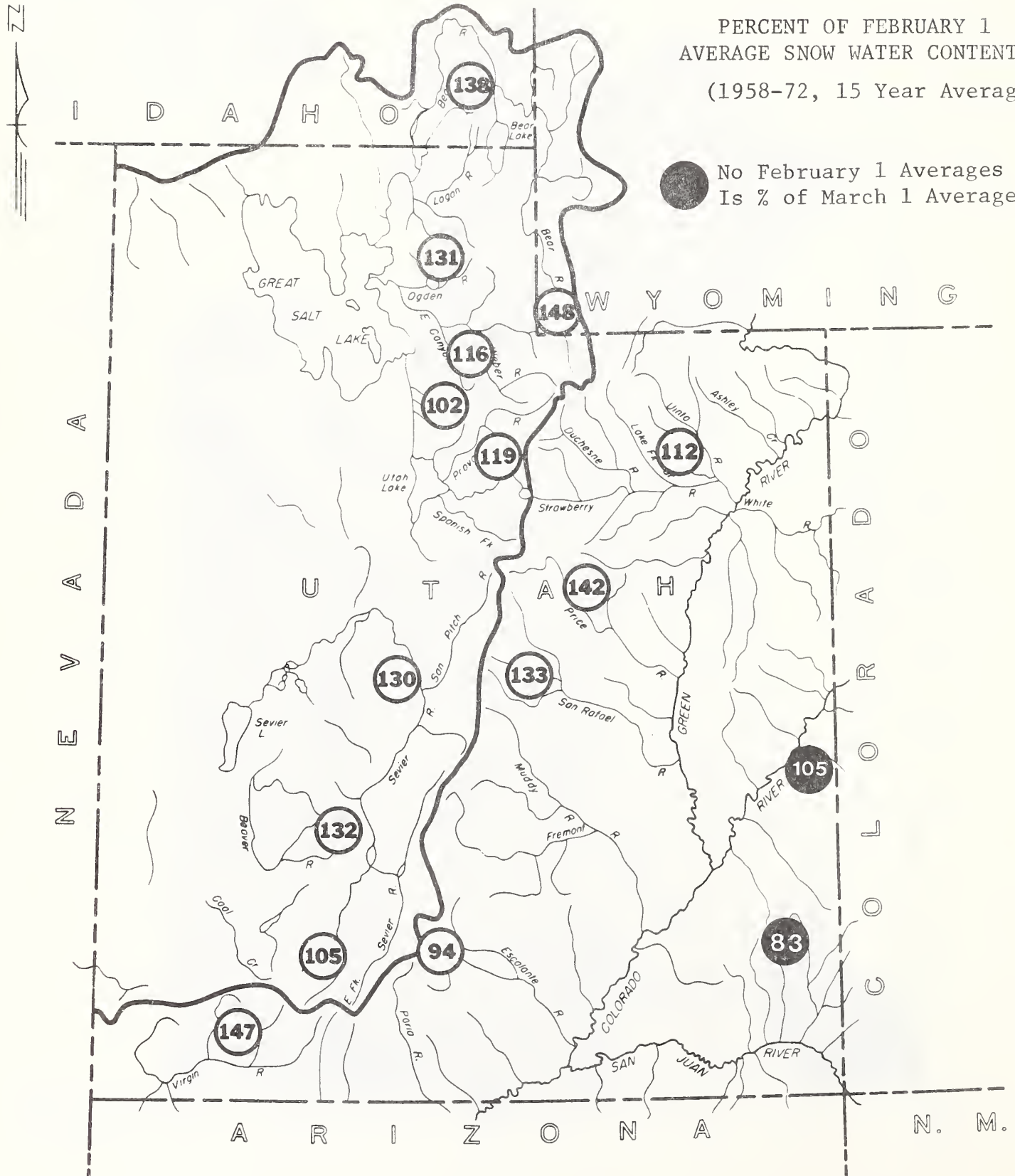
FEBRUARY 1, 1978

Approximate Date



PERCENT OF FEBRUARY 1
AVERAGE SNOW WATER CONTENTS
(1958-72, 15 Year Average)

● No February 1 Averages
Is % of March 1 Averages



WATER SUPPLY OUTLOOK

as of
FEBRUARY 1, 1978

* Utah's 1978 water supply outlook ranges from below average in *
* the southern and eastern part of the state, to near average *
* for central and northern Utah. Snow cover ranges from 94% of *
* average on the Escalante Drainage to 148% on the Upper Bear *
* River. Reservoir storage is 90% of average and 22% less than *
* a year ago and watershed soil moisture is below average. *

SNOW COVER

Snow cover improved at a faster than normal rate in southern Utah bringing those basins up to near average or a little above average for February 1. The Upper Sevier is now 105% of average, Beaver River 132%, Virgin River is 147%, although weighted heavily by one low elevation measurement at Long Valley Junction, which should melt prior to April 1. The Lower Sevier is 130%, San Rafael 133%, Price River 142%, and Duchesne River 112% of average. Provo River snow cover is now 119% of average. Watersheds above Salt Lake are now 112%, Weber River 116%, Ogden 131%, and the Lower Bear River 138% of the February 1 average. The LaSal and Blue Mountains have no February 1 average, but their snow cover is near a March 1 average as of this time.

PRECIPITATION

Precipitation at mountain stations ranged from about two-thirds average to 130% of average in northern Utah, to as much as three times average at some locations in southern Utah during January.

SOIL MOISTURE

Soil moisture is generally below average statewide. Fall rains recharged the top 12-24 inches in some locations, but the remainder of the profile is reported as very dry. These dry soils are expected to reduce spring snow-melt runoff.

RESERVOIR STORAGE

Reservoir storage is generally below average. Storage in 24 of Utah's irrigation reservoirs is now 90% of the February 1 average, 22% less than a year ago, and only 53% of useable capacity. Many reservoirs in southern and eastern Utah are not expected to fill this year.

Sevier River reservoirs are only 69% of average and 68% of last year. Uintah Basin reservoirs (Moon Lake and Steinaker) are only 42% of average and 36% less than last year at this time. High lakes in the Uintahs look lower than any time in the last ten years. The Great Salt Lake was 4199.10 feet above mean sea level, 1.40 feet lower than a year ago and 7.75 feet above the all-time low of October 1963, according to U.S. Geological Survey.

WATER SUPPLY OUTLOOK (continued)

STREAMFLOW FORECASTS

Streamflow forecasts range from 76% of average for the Sevier below Piute to 138% for the Inflow to Scofield Reservoir. Forecasts range from 10 to 20% below average on Sevier and Uintah Basin streams to generally average to 15 to 20% above average on all other streams. Bear River is forecast 101% of the April-July average at the Utah-Wyoming State Line and 105% at Harer, Idaho. Logan River is forecast 109% of average, the Inflow to Pineview Reservoir 120%, Weber near Oakley 114% and Weber near Coalville 110%. Provo River is forecast 104% at Hailstone and 102% below Deer Creek Dam. Strawberry Inflow is forecast 115% of average and Utah Lake Inflow 101% of the April-July average. Ashley Creek is forecast 81%, Lakefork Creek 87%, Rock Creek 94%, and Duchesne at Tabiona 94%. Huntington Creek, Cottonwood Creek, and Muddy Creek are forecast 102% of average and Ferron Creek 105%. San Juan near Bluff 103% and Mill Creek above Moab 112% of average.

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



SNOW COVER ranges from 138% of the February 1 average on the Lower Bear to 148% on the Upper Bear. Logan River watershed is 134% of average. This year's snow water is about six to seven times last year at this time.

SOIL MOISTURE is below average. Good fall moisture is reported to have penetrated only the top 18 to 24 inches of the soil profile.

RESERVOIR STORAGE is below average in Bear Lake and Woodruff Narrows and near average in Hyrum and Porcupine Reservoirs.

STREAMFLOW FORECASTS range from 80% of the April-July average on Blacksmith Fork to 131% on Big Creek. The Bear near Utah-Wyoming State Line is forecast 101% of average and at Harer, Idaho, 105% of average. Logan River is forecast 109% of the April-July average. Some runoff will be used to replenish soil moisture and ground water after last year's short year.

BEAR RIVER BASIN in UTAH

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		FORECAST PERIOD	PAST RECORD	
	Thousand Acre Feet	Percent of Average		Last Year ²	Average ³
BEAR RIVER					
Bear nr Ut-Wyo. State Line	113	101	Apr-July	41	112
Bear nr Woodruff	136	103	Apr-July	28	131
Woodruff Crk nr Woodruff, UT	17.4	113	Apr-July	2.7	15.4
Big Creek nr Randolph, Utah	5.5	131	Apr-July	—	4.2b
Bear nr Randolph	104	102	Apr-July	3.4	102
Thomas Fork nr Ut-Wy State Ln	48	130	Apr-Sept	3.8	32
Smith's Fork nr Border, Wyo.	150	130	Apr-Sept	26.8	116
Bear at Harer, Idaho ¹	3.3	105	Apr-Sept	34.6	297
Logan nr Logan ¹	123	109	Apr-July	34	113
Blacksmith Fork nr Hyrum	38	80	Apr-July	16.7	48
Little Bear nr Paradise	28	82	Apr-June	6.3	34
Cub River nr Preston, ID	57	114	Apr-Sept	—	50
¹ - Observed flow corrected for change in storage and diversions ² - Provisional flows - Subject to correction ³ - Average of all past record - less than 15 years					

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or SUB-WATERSHED	Number of Gauges Averaged	THIS YEAR AS A PERCENT OF	
		Last Year	Average
BEAR RIVER	25	624	140
UPPER BEAR RIVER	5	671	148
LOWER BEAR RIVER	20	613	138
LOGAN RIVER	3	721	134

RESERVOIR STORAGE (Thousand Acre Feet)

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average ¹
BEAR RIVER	Bear Lake	1421.0	1774.8	1030.6	944.9
	Woodruff Narrows	26.5	4.2	1.5	20.5b
	Woodruff Creek	—	1.1	—	—
LITTLE BEAR	Hyrum	15.3	10.1	10.8	9.9
	Porcupine	11.3	2.8	3.4	2.9b
¹ - 1958-72 15 Year Average Period b - estimated					

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average ¹
To begin March 1, 1978		

WATER RESOURCES DIVISION, PM7-N-22027X

¹ - 1958-1972 period

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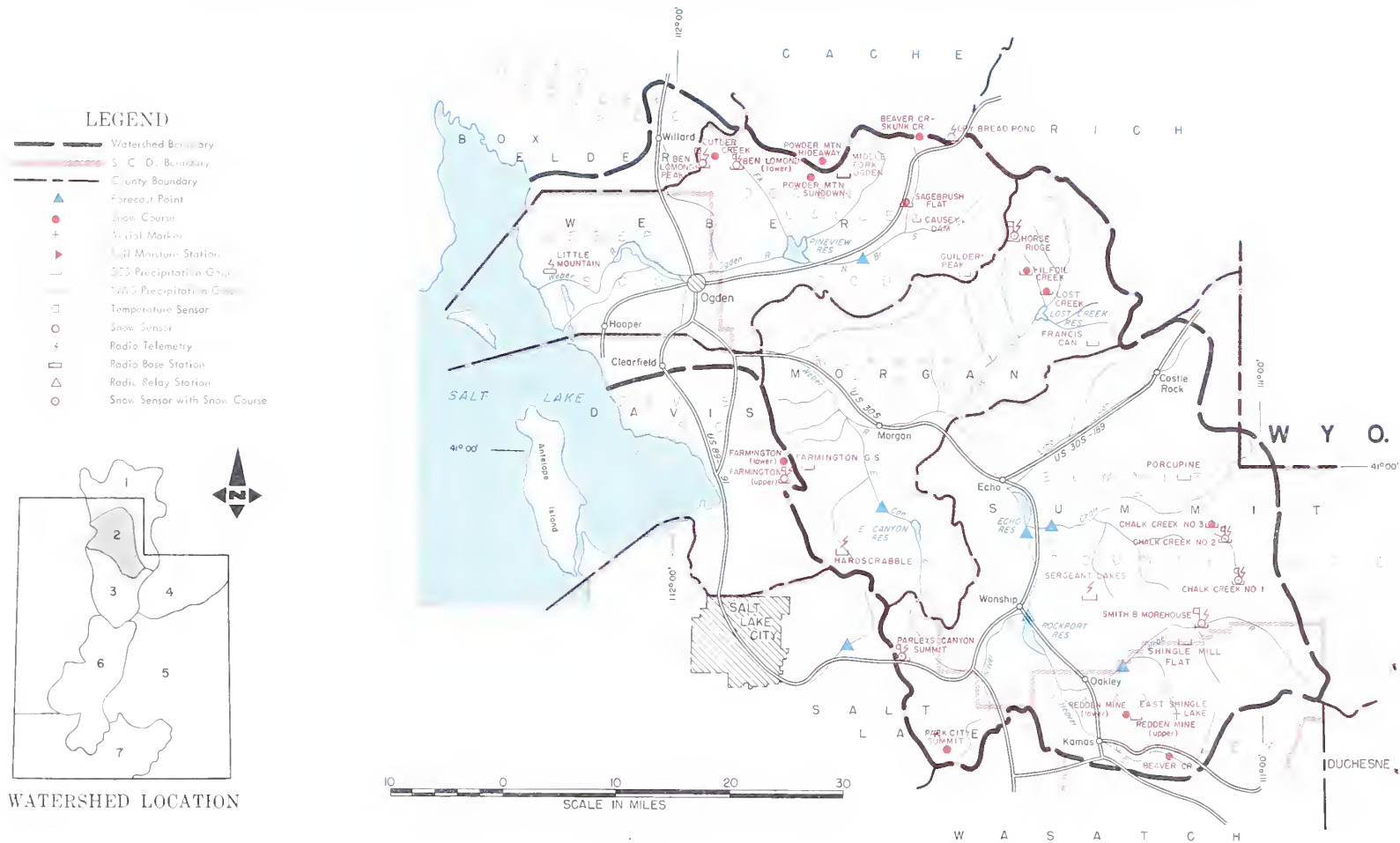
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WATER SUPPLY OUTLOOK

WEBER-OGDEN WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



THE WATER SUPPLY OUTLOOK IS NEAR AVERAGE

SNOW COVER is 116% of the February 1 average on the Weber River and 131% on the Ogden River.

PRECIPITATION at mountain stations during January ranged from 48% of average at Sagebrush Flat to 138% at Parleys Canyon Summit. The October-January period ranged from 97% at Ben Lomond Lower to 118% at Parleys Summit.

SOIL MOISTURE is below average except in the top few inches of the profile.

RESERVOIR STORAGE is now 92% of average on the Ogden River and 100% on the Weber. Lost Creek and Rockport Reservoirs are the shortest with 77% and 79% of the February 1 average respectively.

STREAMFLOW FORECASTS for the April-June period now range from 97% on Chalk Creek to 120% of average for Pineview Reservoir Inflow. South Fork Ogden is forecast 118%, Lost Creek 116%, Hardscrabble 114%, East Canyon 105%, Weber at Oakley 114%, Rockport Inflow 107%, and 110% at Coalville. These flows are expected to fill most reservoirs with the possible exception of East Canyon and Lost Creek.

WEBER-OGDEN WATERSHEDS in UTAH

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		FORECAST PERIOD	PAST RECORD	
	Thousand Acre Feet	Percent of Average		Thousand Acre Feet	Average +
<u>WEBER-OGDEN RIVERS</u>					
Weber nr Oakley	114	114	Apr-June	31.6	100
Rockport Reservoir Inflow ¹	122	107	Apr-June	—	114
Chalk Creek at Coalville	31	97	Apr-June	4.2	32
Weber nr Coalville	124	110	Apr-June	14.3	113
Lost Creek nr Croyden, Utah	15.9	116	Apr-June	2.5	13.7
East Canyon Creek nr Morgan ¹	23	105	Apr-June	11.4	22
Hardscrabble Crk nr Porterville	16.6	114	Apr-June	—	14.4b
South Fork Ogden nr Huntsville	59	118	Apr-June	8.5	50
Pineview Reservoir Inflow ²	132	120	Apr-June	13.5	110
<u>JORDAN RIVER & SALT LAKE</u>					
Farmington Crk nr Farmington	7.8	100	Apr-July	—	7.8
1 - Observed flow corrected for change in storage and diversions					
2 - Inflow record as computed by U.S. Bureau of Reclamation					
3 - Provisional flows - Subject to Correction					
b - Average of all past record - less than 15 years					

1 - Observed flow corrected for change in storage and diversions
 2 - Inflow record as computed by U.S. Bureau of Reclamation
 3 - Provisional flows - Subject to Correction
 b - Average of all past record - less than 15 years

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or SUB-WATERSHED	Number of Gauging Stations	THIS YEAR AS A PERCENT OF	
		Last Year	Average
OGDEN RIVER	6	659	131
WEBER RIVER	7	480	116

RESERVOIR STORAGE (Thousand Acre Feet)

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average +
OGDEN	Causey	6.9	2.6	1.4	2.3b
	Pineview	110.1	36.4	53.6	40.1
WEBER	East Canyon	48.1	19.9	30.4	18.5
	Echo	73.9	41.6	41.5	39.1
	Lost Creek	20.0	9.6	12.7	12.4b
	Rockport	60.9	22.7	26.8	28.6
	Willard Bay	193.3	114.5	139.7	110.3b

+ - 1958-72 15 Year Average Period

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
To begin March 1, 1978		

WATER RESOURCES DIVISION, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C. 20250

+ 1958-1972 period

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UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



STREAMFLOW FORECASTS range from 91% of the April-July average on American Fork to 143% on Vernon Creek. The Provo at Hailstone is forecast 104%, at Deer Creek Dam 102%, Spanish Fork 106%, Payson Creek 111%, Hobble Creek 94%, and Utah Lake Inflow 101%. Strawberry Reservoir Inflow is forecast 115% of the April-July average or almost ten times last year's inflow. Big Cottonwood is forecast 108%, Little Cottonwood 111%, and Parleys Creek 114% of their April-July averages.

UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		FORECAST PERIOD	PAST RECORD	
	THOUSAND ACRES	PERCENT OF AVERAGE		THOUSAND ACRES	PERCENT OF AVERAGE
PROVO RIVER & UTAH LAKE					
Provo nr Hailstone ¹	106	104	Apr-July	31.5	102
Provo below Deer Creek Dam ¹	113	102	Apr-July	50.1	111
American Fork nr American Fork	28	97	Apr-July	7.5a	29
Hobble Creek nr Springville ¹	15	94	Apr-July	----	16
Strawberry Reservoir Inflow ¹	53	115	Apr-July	5.7	45
Spanish Fork at Thistle	34	106	Apr-July	----	32
Payson Creek nr Payson	7.0	111	Apr-July	----	6.3
Utah Lake Inflow	211	101	Apr-July	124.7	208
JORDAN RIVER & SALT LAKE					
Little Cottonwood Crk nr SLC	39	111	Apr-July	19.8	35
Big Cottonwood nr SLC	39	108	Apr-July	18.8	36
Parley's Creek nr SLC	13.1	114	Apr-July	3.5	11.5
TOOELE VALLEY					
Vernon Creek nr Vernon	1.0	143	Mar-July	0.6	0.7

1 - Observed flow corrected for change in storage and diversions
2 - Provisional flows - Subject to correction
a - Partly estimated

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS A PERCENT OF	
		Last Year	Average
PROVO RIVER & UTAH LAKE	10	472	119
JORDAN RIVER & SALT LAKE	3	552	112
TOOELE VALLEY	1	191	81

RESERVOIR STORAGE (Thousand Acre Feet)

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average [†]
SPANISH FORK	Strawberry	270.0	141.2	204.9	113.6
UTAH LAKE	Utah Lake	883.9	609.0	731.3	563.0
	Settlement Creek	1.2	0.3	0.5	----
	Vernon Creek	0.6	0.3	0.4	----
PROVO	Deer Creek	149.7	70.7	87.0	94.7

+ - 1958-1972 15 years average period.
b - Average of all past record - less than 15 years.

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average [†]
To begin March 1, 1978		

WATER RESOURCES DIVISION, PWT-11 - 22027X

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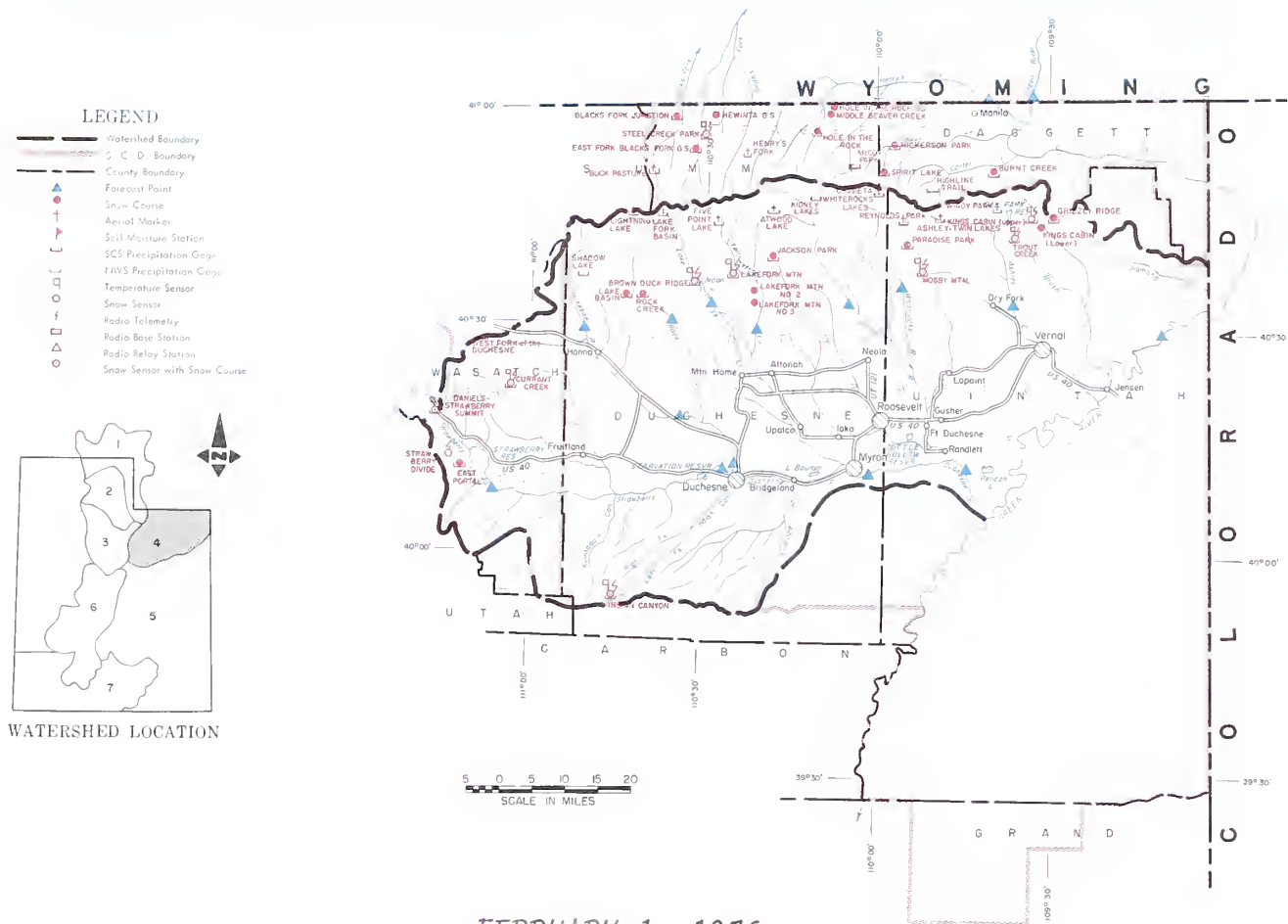
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WATER SUPPLY OUTLOOK

UINTAH BASIN and DAGGETT SCD's in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



FEBRUARY 1, 1978

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER ranges from 83% of the February 1 average on the Uintah-Whiterocks drainages to 135% on Strawberry River. Lakefork-Yellowstone drainages are 96% of the February 1 average. Ashley Creek courses do not have an average for February 1, but their snow water content is about three times last year.

PRECIPITATION at mountain stations ranged from 78% of average at Burnt Creek above Manila to 162% at Daniels-Strawberry Summit for the month of January.

SOIL MOISTURE is below average.

RESERVOIR STORAGE is 63% of the February 1, average for Moon Lake and only 27% of average for Steinaker. Moon Lake has 4,000 acre feet more in storage than last year at this time, but Steinaker is 12,000 acre feet less.

STREAMFLOW FORECASTS for the April-July period range from 78% of average on Whiterocks to 106% for Flaming Gorge Inflow. Ashley Creek is expected to be 81% of average, Black's Fork 90%, and Henry's Fork 89%. The Duchesne is forecast 94% of average at Tabiona, 98% at Duchesne, 99% at Myton, and 94% at Randlett. Rock Creek is forecast 94%, Lakefork 87%, Yellowstone 88%, the Uintah 80%, and Strawberry 96% of average.

UINTAH BASIN and DAGGETT SCD's in UTAH

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year ²	Average [†]
DUCHESNE RIVER					
Duchesne nr Tabiona ¹	98	94	Apr-July	19.2	104
Duchesne at Duchesne ¹	173	98	Apr-July	48.4	185
Strawberry at Duchesne	54	96	Apr-July	10.1	56
Rock Creek nr Mtn. Home	88	94	Apr-July	34.5	95
Lakefork below Moon Lake ¹	60	87	Apr-July	30.2	69
Yellowstone nr Altonah	57	88	Apr-July	29.1	65
Duchesne at Myton ¹	215	99	Apr-July	8.3	218
Whiterocks nr Whiterock	45	78	Apr-July	24.2	58
Uintah nr Neola	70	80	Apr-July	70.5	88
Duchesne at Randlett ¹	250	94	Apr-July	13.1	267
FLAMING GORGE TO DUCHESNE RIVER					
Henry's Fork at Linwood	40	89	Apr-Sept	3.6	45
Black's Fork at Millburne	85	90	Apr-July	43.6	94
Flaming Gorge Inflow ¹	1241	106	Apr-July	233.0	1174
Ashley Creek nr Vernal	40	81	Apr-July	14.2	50
1 - Observed flow corrected for change in storage and diversions. 2 - Provisional flows - Subject to correction					

1 - Observed flow corrected for change in storage and diversions.
2 - Provisional flows - Subject to correction

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or SUBWATERSHED	Number of Gauging Stations	THIS YEAR AS A PERCENT OF	
		Last Year	Average ⁺
DUCHESNE RIVER - TOTAL	8	603	112
LAKEFORK--YELLOWSTONE CREEKS	2	892	96
STRAWBERRY RIVER	3	594	135
UINTAH-WHITEROCKS RIVERS	2	554	83
ASHLEY CREEK	2	329	----
BLACK'S FORK	4	394	----

RESERVOIR STORAGE (Thousand Acre Feet)

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average ⁺
ASHLEY CREEK	Steinaker	33.3	6.1	18.3	22.9b
GREEN RIVER	Flaming Gorge	3749.0	1987.5	3017.0	1641.0
LAKE FORK	Moon Lake	35.8	10.2	6.1	16.3
STRAWBERRY	Starvation	165.3	140.2	45.5	----
UINTAH	Bottle Hollow	11.3	10.1	10.6	----

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average ⁺
To Begin March 1, 1978		

+ - 1958-1972 15 year average period

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SNOW COVER on Price River is 142% of the February 1 average and about nine times last year at this time. The San Rafael is 133% of average and about five times last year on February 1.

SOIL MOISTURE is near average in the top 12 to 24 inches, but below average for the rest of the profile.

RESERVOIR STORAGE is only 60% of average in Scofield, but near average in Joe's Valley and Huntington North reservoirs.

STREAMFLOW FORECASTS for the April-July period range from 97% for the Inflow to Navajo to 138% for the Inflow to Scofield Reservoir. Price River is forecast 131% of average, Huntington Creek 102%, Cottonwood Creek 102%, Ferron Creek 105%, and Muddy Creek 102% of the April-July average. The Colorado is forecast 129% at Cisco, Green River 121%, San Juan near Bluff 103%, and Mill Creek near Moab 112%. All forecasts this year are for four to five times the flow received last year.

CARBON, EMERY, WAYNE, GRAND AND SAN JUAN COUNTIES in UTAH

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average +
BASIN STREAM and/or FORECAST POINT					
PRICE RIVER					
Gooseberry Creek nr Scofield	13.6	136	Apr-July	2.2	10.0
Scofield Reservoir Inflow	47	138	Apr-July	4.2	34
Price nr Heiner ¹	84	131	Apr-July	----	64b
SAN RAFAEL RIVER					
Huntington Crk nr Huntington	46	102	Apr-July	11.3	45
Cottonwood Crk nr Orangeville	47	102	Apr-July	10.4	46b
Ferron Creek nr Ferron	37	105	Apr-July	15.9	35
MUDDY RIVER					
Muddy Creek nr Emery	18.1	102	Apr-July	3.5	17.0
UPPER COLORADO BASIN					
Colorado nr Cisco, Utah	3660	129	Apr-July	534.6	2835
Green at Green River, Utah	3441	121	Apr-July	882.7	2839
Mill Creek nr Moab	5.5	112	Apr-July	1.4	4.9
Navajo Reservoir Inflow	580	97	Apr-July	----	597
San Juan nr Bluff, Utah	882	103	Apr-July	122.8	853
FREMONT RIVER					
Seven Mile Crk nr Fish Lake	7.0	109	Apr-July	----	6.4b

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or SUBWATERSHED	Number of Gauging Stations	THIS YEAR AS A PERCENT OF	
		Last Year	Average
PRICE RIVER	4	900	142
SAN RAFAEL RIVER	5	504	133

1 - Observed flow corrected for change in storage and diversions
2 - Provisional flows - Subject to correction

RESERVOIR STORAGE (Thousand Acre Feet)

RESERVOIR STORAGE (Thousands Acre Feet)		Usable Capacity	USEABLE STORAGE		
BASIN OR STREAM	RESERVOIR		This Year	Last Year	Average†
<u>PRICE RIVER</u>	Scofield	65.8	17.3	28.4	28.8
<u>SAN RAFAEL</u>	Huntington North	3.9	2.1	2.4	2.0b
	Joe's Valley	54.6	33.5	30.2	30.8
	Mill Site	16.7	0.3	1.5	----
<u>SAN JUAN</u>	Navajo	1696.0	955.5	1145.3	----

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average
To Begin March 1, 1978		

+ - 1958-1972 15-year average period

b - Average of all past record - less than 15 years

WESTERN PORTLAND CEMENT CO. P. 7 - N - 22027 X

1958-1972 period

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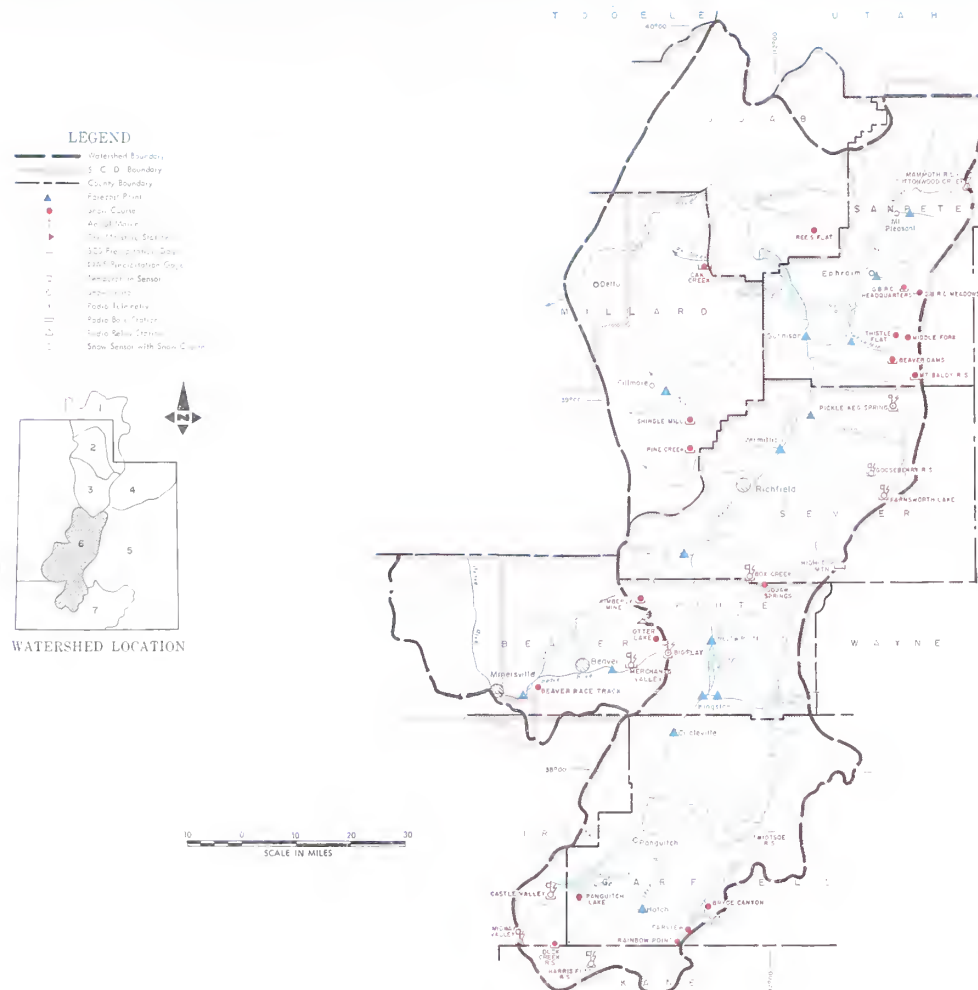
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"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK

SEVIER RIVER BASIN including BEAVER RIVER in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



FEBRUARY 1, 1978

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER ranges from 93% of average on the East Fork to 132% on Beaver River. The South Fork Sevier is now 106% of the February 1 average and the Lower Sevier 130% of average after much heavier than usual January increases.

PRECIPITATION at mountain stations ranged from 128% of the January average at Farnsworth Lake to 389% at Shingle Mill. The October-January totals now range from 95% of average at Duck Creek to 156% at Mammoth-Cottonwood Creek.

SOIL MOISTURE is below average.

RESERVOIR STORAGE is well below average. Otter Creek is 68% of average, Piute is 49% of average, Sevier Bridge 85%, and Gunnison is only 10% of average. These reservoirs are not expected to fill this season.

STREAMFLOW FORECASTS range from 74% of the April-July average for the Sevier near Kingston to 115% for Ephraim and Pleasant Creeks on the San Pitch River. Sevier River is forecast 85% of average at Hatch, 89% at Circleville, 80% on the East Fork near Kingston, 76% below Piute Dam, and 87% at Gunnison. The Inflow to Sevier Bridge Reservoir during the October-March period is expected to be only about 50,000 acre feet, but primary water is expected to be near average or a little above on the upper river and a little below average below Vermillion Dam. Beaver River is forecast 104% near Beaver and about 100% for inflow to Minersville Reservoir. Chalk Creek near Fillmore is forecast about average and Clear Creek 93% of the April-July average.

SEVIER RIVER BASIN including BEAVER RIVER in UTAH

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average †
SEVIER RIVER					
Sevier at Hatch	34	85	Apr-July	10.6	40
Sevier nr Circleville	25	89	Apr-July	---	28
Sevier nr Kingston	15.5	74	Apr-July	1.9	21
Antimony Crk nr Antimony	6.2	85	Apr-July	---	7.3
East Fork Sevier nr Kingston	11.5	80	Apr-July	---	14.4
Sevier below Piute Dam ¹	25	76	Apr-July	---	33
Clear Crk nr Sevier (abv Div)	14.0	93	Apr-July	4.1	15.0
Inflow					
Kingston to Vermillion Dam	36	72	Apr-June	---	50
Vermillion Dam to Gunnison	37	95	Mar-June	---	39
Salina Creek at Salina	7.3	90	Apr-June	0.1	8.1b
Sevier nr Gunnison	34	87	Apr-July	15.4	39
Chalk Creek nr Fillmore	15.5	100	Apr-July	---	15.5b
SAN PITCH RIVER					
Ephraim Creek nr Ephraim	16.0	115	Apr-July	---	13.9b
Pleasant Crk nr Mt. Pleasant	9.0	115	Apr-July	---	7.8
BEAVER RIVER					
Beaver nr Beaver	20.7	104	Apr-July	6.1	20
North Creek (combined)	11.7	100	Apr-July	---	11.7
Minersville Reservoir Inflow	5.8	100	Apr-June	---	5.8

RESERVOIR STORAGE (Thousand Acre Feet)

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average [†]
SEVIER RIVER	Gunnison	18.2	1.0	1.4	9.8
	Otter Creek	52.5	17.3	27.0e	25.4
	Piute	71.8	18.1	23.5	37.2
	Sevier Bridge	236.0	71.2	106.0	83.2
BEAVER RIVER	Minersville (Rky Fd)	23.3	4.4	7.3	11.3

b - Average of all past record - less than 15 years
+ - 1958-1972 15 year average period
e - Estimated

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Creek nr Sevier-above Div.	5	July 22	July 28
Salina Creek at Salina	25	June 6	June 10
Sevier at Circleville	90	June 7	June 24
Sevier at Hatch (upper)	100	June 19	July 10

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or SUB-WATERSHED	Number of Gauging Stations	THIS YEAR AS A PERCENT OF	
		Last Year	Average
UPPER SEVIER RIVER	5	289	105
East Fork Sevier	4	483	93
South Fork Sevier	4	293	106
LOWER SEVIER	6	338	130
BEAVER RIVER	2	338	132

1 - Observed flow corrected for change in storage and diversions
2 - Provisional flows - Subject to correction

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average [†]
To Begin March 1, 1978		

PRIMARY WATER RIGHT FORECASTS (PERCENT OF WATER RIGHT DELIVERED)

RIVER SECTION	Percent Forecast For This Year	Average Percent Delivered During 15 year Period [†]	Forecast Period
SEVIER RIVER			
Panguitch Valley	95	82	April-Sept
Circle Valley	73	65	April-Sept
Sevier Valley	38	38	April-Sept
Below Vermillion Dam	49	55	April-Sept

Inflow to Sevier Bridge Reservoir for the October-March period is expected to be about 50,000 acre feet.

The flow below Vermillion - Above 360 cfs is expected to be 1500 acre feet.

Utah Rice Point-Lake Oregon-1978 147-N-32027A

1958-1972 period

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WATER SUPPLY OUTLOOK

EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER varies from 67% of average on Parowan Creek to 147% on the Virgin River. Coal Creek is 103% of the February 1 average. Virgin River snow cover is based on two snow courses; one is Long Valley Junction, a low elevation course which has more than twice its average February 1 snow water content.

PRECIPITATION at mountain locations ranged from 97% of the January average at Tall Poles to 240% at Webster Flat. The October-January totals now range from 69% at Tall Poles to 102% at Webster Flat.

SOIL MOISTURE is well below average.

RESERVOIR STORAGE is reported below average in most small reservoirs. Lake Powell contains 14,789,000 acre feet or about 3,229,000 less than last year at this time.

STREAMFLOW FORECASTS range from 77% of the April-June average for the Virgin River near Virgin to 125% of average for Santa Clara near Pine Valley. Coal Creek is forecast 87% of the April-July average and Lake Powell Inflow is expected to be 122% of average.

EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

STREAMFLOW FORECASTS

BASIN STREAM and/or FORECAST POINT	THIS YEAR		FORECAST PERIOD	PAST RECORD	
	FORECAST	FORECAST		THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year 2	Average †
<u>VIRGIN RIVER</u>					
Virgin nr Virgin	37	77	Apr-June	24.7e	48b
Santa Clara nr Pine Valley	4.5	125	Apr-June	0.8	3.6b
<u>COAL CREEK</u>					
Coal Creek nr Cedar City	14.0	87	Apr-July	3.6	16.1
<u>UPPER COLORADO</u>					
Lake Powell Inflow	8362	122	Apr-July	1130	6881
2 - Provisional Flows - Subject to correction					
e - Estimated					

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and or SUB-WATERSHED	Number of Gauges Averaged	THIS YEAR AS A PERCENT OF	
		Last Year	Average †
COAL CREEK	2	284	103
VIRGIN RIVER	2	400	147
PAROWAN CREEK	1	246	67

RESERVOIR STORAGE (Thousand Acre Feet)

BASIN OR STREAM	RESERVOIR	Usable Capacity	USEABLE STORAGE		
			This Year	Last Year	Average †
<u>COLORADO</u>	Lake Powell	25002.0	14789.0	18018.0	8401b
	Blue Mesa	829.5	279.3	416.1	---
b - Average of all past record - less than 15 years					
+ - 1958-1972 15 year average period					

PEAK FLOWS

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
To begin March 1, 1978		

WATER SURVEILLANCE DIVISION W-77-N-22077X

† 1958-1972 period

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SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)					
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
				Last Year	Average †	Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
NAME											
GREAT BASIN											
UPPER BEAR RIVER (Above Harer, Idaho)											
Big Park	1/30	63	20.4	3.8	13.3						
Burts-Miller Ranch	1/24	22	4.5	0.6	- -	1/24	1.85	- -	5.64	- -	- -
CCC Camp	1/31	45	14.6	3.4	8.6						
Hayden Fork	1/24	42	12.4	2.2	- -	1/24	3.76	- -	15.67	- -	- -
Kelly R.S.	1/30	59	19.0	3.2	11.9						
Monte Cristo R.S.	1/27	62	19.3	3.2	17.0b	1/27	3.45	- -	19.86	16.91a	117
Poison Meadows	2/2	111	33.1	- -	21.2b						
Salt River Summit	1/30	56	18.0	3.6	11.0	1/30	4.90	3.77	16.77	10.81	155
Snyder Basin	2/2	66	20.2	- -	10.3						
Stillwater Camp	1/24	31	8.0	1.5	- -	1/24	1.88	- -	8.89	- -	- -
LOWER BEAR RIVER (Below Harer, Idaho)											
Christensen Ranch	1/31	34	8.9	2.2	5.9						
Cliff Canyon	1/31	27	7.2	- -	- -						
Cub River R.S.	1/31	34	9.4	2.4	5.8						
Daniels Creek	1/31	22	5.9	0.7	- -						
Dry Basin	1/31	80	28.9	4.3	20.9a						
Dry Creek Flat	1/31	29	9.0	1.3	5.3	1/31	- -	- -	12.20	- -	- -
Emigrant Summit	1/31	75	23.8	3.4	17.0b						
Emigration Canyon	1/31	36	11.0	2.5	7.8a						
Franklin Basin	1/31	64	23.4	3.8	- -						
Garden City Summit	1/30	46	15.0	2.1	11.9	1/30	3.30	3.86b	18.00a	12.68b	142
Horseshoe Basin	1/31	66	25.8	4.0	17.3a						
Klondike Narrows	1/27	60	18.6	2.5	13.3	1/27	4.17e	4.91b	20.91a	13.78b	152
Liberty Springs	1/31	103	38.5	5.5	22.6						
Little Bear (lower)	1/27	35	8.7	1.6	- -						
Little Bear (upper)	1/27	38	9.3	2.2	- -						
Lower Elkhorn	1/31	42	14.4	2.2	9.8a						
Oxford Mountain	1/31	34	10.7	1.7	6.9a						
Slug Creek Divide	2/1	56	17.0	2.9	11.5a						
Steep Hollow #1	1/31	94	34.4	5.1	25.4b						
Steep Hollow #2	1/31	74	25.8	3.2	18.8b						
Strawberry Creek	1/31	39	10.1	2.2	7.2						
Strawberry Mink Divide	1/31	66	21.0	3.1	14.4						
Tony Grove Lake	1/31	103	37.4	4.5	- -						
Tony Grove R.S.	1/30	40	11.8	1.7	8.8	1/30	2.92	4.36a	17.30	13.09a	132
Upper Elkhorn	1/31	52	18.0	2.5	12.0a						
Willow Flat	1/31	52	14.8	2.3	10.5	1/31	4.89	4.81b	23.79	14.86b	160
Worm Creek	1/31	58	18.8	2.6	- -						
OGDEN RIVER											
Beaver Creek-Skunk Creek	1/27	36	10.0	1.6	8.0						
Ben Lomond Peak	1/27	98	31.0	4.2	24.0b						
Ben Lomond (lower)	1/27	54	14.8	2.5	10.0	1/27	7.31	5.45	21.98	16.81	131
Ben Lomond Trail						1/27	7.49	4.80a	- -	16.61a	- -
Causey Dam						1/27	1.89	3.05a	8.77	9.07a	97
Cutler Creek	1/27	86	24.0	3.3	18.7b						
Dry Bread Pond	1/27	50	15.4	2.8	11.3	1/27	3.85	6.43b	- -	13.30b	- -
Sagebrush Flat	1/27	17	3.7	0.6	3.7	1/27	2.17	4.47a	10.37	9.33	111
WEBER RIVER											
Beaver Creek R.S.	1/25	24	5.6	0.6	5.7						
Chalk Creek #1	1/24	57	16.1	3.6	- -						
Chalk Creek #2	1/24	39	9.2	2.6	9.0						
Chalk Creek #3	1/24	23	4.9	1.0	5.1	1/24	2.00	- -	9.40	- -	- -
East Shingle Lake (A)	1/27	72	23.8	- -	- -						
Farmington Canyon (lower)	1/27	63	16.5	3.8	13.2b	1/27	6.50	5.02	20.10	17.31	116
Farmington Canyon (upper)	1/27	76	21.4	4.4	17.5b						
Farmington G.S.						1/27	6.39	- -	22.09	- -	- -
Horse Ridge	1/27	53	16.6	2.6	- -	1/27	2.75	- -	18.62	- -	- -
Kilfoil Creek	1/27	40	9.3	1.2	- -						
Lost Creek Reservoir	1/27	24	4.6	0.0	- -	1/27	1.80	- -	8.12	- -	- -
Park City Summit	1/30	54	17.7	4.6	- -						
Parley's Canyon Summit	1/30	50	14.4	2.8	11.7	1/23	5.34	3.86	16.57	14.08	118

SNOW

PRECIPITATION (Inches)

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)			FROM APPROX. OCT 1 TO DATE		
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
				Last Year	Average †						
NAME											
WEBER RIVER (cont'd)											
Redden Mine (lower)	1/25	42	12.0	2.6	- -						
Redden Mine (upper)						1/25	- -	- -	15.55	- -	- -
Sergeant Lake (A)	1/27	54	15.1	- -	- -						
Smith & Morehouse	1/24	31	9.1	1.7	8.6b	1/24	3.26	3.26	12.76	11.62	110
PROVO RIVER & UTAH LAKE											
Beaver Creek Divide	1/25	38	9.9	1.4	- -						
Camp Altamont	1/24	39	10.9	2.1	10.0						
Clear Creek Ridge #1	1/27	54	14.6	3.3	- -						
Clear Creek Ridge #2	1/27	41	10.2	- -	8.4	1/27	3.65	- -	13.10	9.74	134
Clear Creek Ridge #3	1/27	29	7.1	1.4	4.9						
Dutchman R.S.	1/24	54	13.9	2.7	- -	1/24	7.45	- -	18.50	- -	- -
Hobble Creek Summit	1/24	48	11.3	2.7	- -	1/24	4.90	- -	11.30	- -	- -
Packard Canyon	1/24	33	7.3	2.3	- -						
Payson R.S.	1/27	50	12.1	4.5	10.5	1/27	5.50	2.78	13.10	10.99	119
Rock Bridge	1/27	39	7.8	3.9	7.3						
Soapstone R.S.	1/25	35	9.6	1.5	8.2	1/25	2.01	3.13	11.98	10.19	118
South Fork R.S.	1/30	27	7.6	1.4	4.2						
Timpanogos Cave Camp	1/30	8	1.8	0.6	1.7						
Timpanogos Divide	1/24	58	15.1	3.6	16.3	2/1	7.37	4.73	19.07	16.72	114
Trial Lake	1/24	64	21.1	2.9	15.5	1/24	3.47	4.85	18.27	14.92	122
JORDAN RIVER & GREAT SALT LAKE											
Lamb's Canyon #2	1/30	42	12.4	2.6	- -	1/30	3.74	- -	13.52	- -	- -
Middle Canyon	1/28	29	6.5	3.4	8.0	1/28	4.90	2.62b	- -	9.90b	- -
Mill Creek	2/2	42	12.7	3.1	- -						
Mill D South Fork	1/31	43	13.2	2.6	12.5						
Mt. Dell Dam						2/1	2.33	2.16	8.67	8.72	100
Silver Lake (Brighton)	1/31	54	16.6	2.6	15.4	2/1	5.91	5.29	18.43	17.73	106
Snow Bird (Gad Valley)	1/28	89	27.3	- -	- -						
Vernon Creek	1/28	32	8.8	1.2	- -	1/28	7.75	- -	11.25	- -	- -
UPPER SEVIER RIVER (South of Richfield, Utah)											
Box Creek	1/30	30	7.3	2.9	- -	1/30	3.65	- -	9.43	- -	- -
Bryce Canyon	1/31	17	2.4	1.0	2.8						
Castle Valley	1/26	26	7.4	2.1	- -	1/26	3.75	- -	7.10	- -	- -
Duck Creek R.S.	1/26	37	10.8	2.8	7.9	1/26	6.10	2.68	10.50	11.05	95
Farview	1/30	21	5.8	1.4	- -						
Harris Flat	1/26	28	7.3	1.6	5.3						
Kimberly Mine	1/30	41	9.6	4.2	9.8b	1/30	5.15	2.88b	12.20	10.34b	118
Midway Valley	1/24	44	10.4	4.4	12.9	1/24	6.50	- -	10.75	- -	- -
Panguitch Lake	1/26	13	4.5	1.3	- -	1/26	3.00e	- -	5.00a	- -	- -
Rainbow Point	1/30	27	7.2	1.8	- -						
Squaw Springs	1/30	23	5.6	1.4	- -						
Widtsoe 3NNE						2/1	1.13	- -	- -	- -	- -
LOWER SEVIER RIVER (Including San Pitch River)											
Beaver Dams	1/25	40	9.5	3.5	- -	1/25	4.45	- -	10.62	- -	- -
Farnsworth Lake	1/30	46	11.8	4.6	10.5	1/30	3.35	2.61	11.20	10.83	103
G.B.R.C. Headquarters	1/27	45	10.9	4.1	8.9	1/27	5.00	2.40	14.05	10.40	135
G.B.R.C. Majors						2/1	3.30	1.30	7.57	5.90	128
G.B.R.C. Meadows	1/27	58	16.1	4.7	12.3	1/27	5.90	3.20	16.85	13.10	129
G.B.R.C. Oaks						2/1	3.80	1.60	9.15	7.00	131
Gooseberry R.S.	1/30	35	9.0	3.5	6.4	1/30	3.40	1.85b	9.85	6.94b	142
Mammoth-Cottonwood Creek	1/27	57	16.6	2.3	12.6b	1/27	5.60	3.50b	18.13	11.59b	156
Middle Fork		Not Measured									
Mt. Baldy R.S.	1/25	62	15.2	4.5	- -	1/25	5.30	- -	13.30	- -	- -
Oak Creek		Data Delayed									
Pickle Keg Springs	1/25	47	11.8	- -	- -						
Pine Creek	1/30	53	16.0	5.4	- -	1/30	11.30	- -	19.05	- -	- -
Ree's Flat		Not Measured									
Shingle Mill	2/1	31	7.7	2.1	4.7b	2/1	7.12	1.83b	10.40	8.14b	128
Thistle Flat		Not Measured									
BEAVER RIVER											
Beaver Race Track	1/31	5	1.5e	0.0	- -						

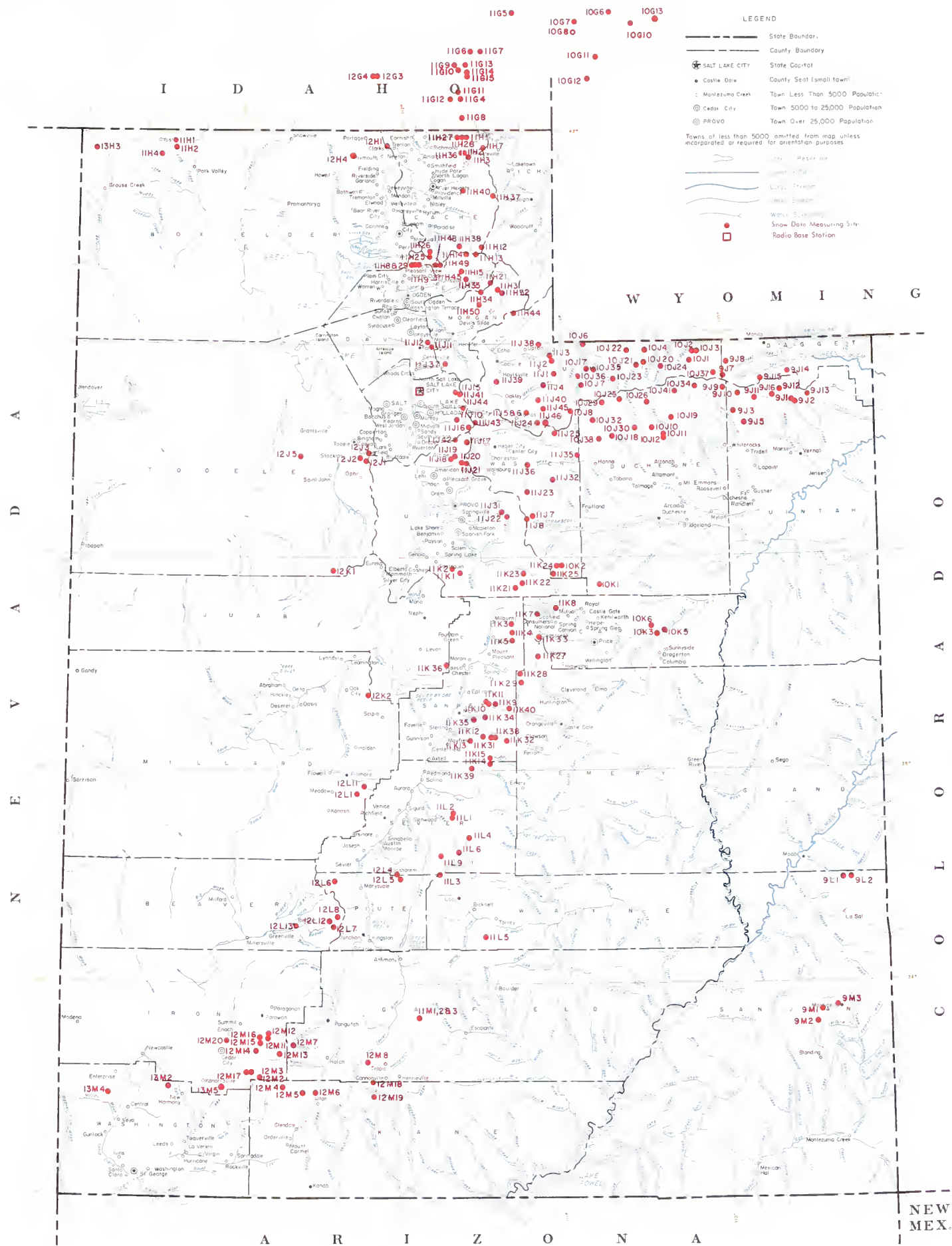
SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)					
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
				Last Year	Average †	Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>BEAVER RIVER (Cont'd)</u>											
Big Flat	1/30	50	12.8	4.0	9.8	1/30	8.35	--	13.13	9.47	139
Merchant's Valley Upper	1/30	38	9.4	3.5	--	1/30	6.20	--	12.15	--	--
Otter Lake	1/30	44	10.5	2.9	7.8						
<u>PAROWAN CREEK</u>											
Birch Crossing	1/25	32	4.8	1.4	--						
Brian Head	1/25	45	9.1	3.7	13.5a						
Ed Ward Flat	1/26	31	6.9	1.4	--						
Tall Poles	1/25	45	7.8	4.0	--	1/25	5.60	5.76a	8.45	12.22a	69
Yankee Reservoir	1/26	31	6.5	2.3	--	1/26	5.00	--	7.50	--	--
<u>ENTERPRISE TO NEW HARMONY DRAINAGES</u>											
Little Grassy Creek	1/26	23	6.1	1.8	--	1/26	6.95	--	9.05	--	--
Long Flat	1/26	24	5.2	1.0	--	1/26	3.45	--	6.80	--	--
<u>COAL CREEK</u>											
Cedar City Golf Course	2/1	0	0.0	0.0	--						
SUSC Ranch	1/24	32	6.2	2.0	--						
<u>COLORADO RIVER DRAINAGE</u>											
<u>UPPER GREEN RIVER - UTAH</u>											
Ashley-Twin Lakes (A)	1/27	24	4.3	--	--						
Black's Fork G.S.-East Fork	1/24	29	7.2	1.7	--	1/24	--	--	8.93	--	--
Black's Fork Junction	1/24	29	6.6	1.5	--	1/24	--	--	8.49a	--	--
Buck Pasture (A)	1/27	58	15.1	--	--						
Burnt Creek	1/30	14	3.2	1.0	--	1/30	1.20	1.53b	3.95	6.47b	61
Dutch John Junction	1/30	12	3.3	--	--						
Grizzly Ridge	1/30	22	6.5	1.5	--	1/30	1.95	2.35b	5.45	9.31b	58
Henry's Fork (A)	1/27	37	8.1	--	--						
Hewinta G.S.	1/24	29	6.5	1.5	--	1/24	--	--	9.65	--	--
Hickerson Park	1/24	20	3.4	1.9	--	1/24	--	--	4.10	--	--
Highline Trail		Not Measured									
King's Cabin (lower)	1/24	17	3.7	0.9	--						
King's Cabin (upper)	1/24	22	4.2	1.5	--	1/24	--	--	5.35	--	--
Reynolds Park (A)	1/27	27	8.1	--	--						
Spirit Lake	1/24	24	4.1	2.9	--	1/24	--	--	6.25	--	--
Steel Creek Park	1/24	45	11.6	3.4	--						
Trout Creek	1/24	25	4.5	1.8	--	1/24	--	--	4.72	--	--
Windy Park (A)	1/27	12	2.2	--	--						
<u>DUCHESNE RIVER</u>											
Atwood Lake (A)	1/27	18	3.8	--	--						
Brown Duck Ridge	1/25	49	13.8	2.2	--	1/25	--	--	11.19	--	--
Chepeta-Whiterocks (A)	1/27	25	7.5	--	--						
Currant Creek	1/24	34	8.1	1.5	--	1/24	3.33	--	9.63	--	--
Daniels-Strawberry Summit	1/24	45	10.9	2.5	9.6	1/24	5.00	3.08	15.43	11.21	138
East Portal	1/30	39	10.5	1.2	6.8	1/30	4.56	3.56b	14.49	12.48b	116
Five Points Lake (A)	1/27	36	7.9	--	--						
Indian Canyon	1/25	37	8.9	1.8	7.9	1/25	2.02	2.36b	9.43	9.07b	104
Jackson Park	1/25	36	7.4	2.2	--	1/25	--	--	8.20	--	--
Lakefork Basin (A)	1/27	48	10.6	--	--						
Lakefork Mountain	1/25	30	6.7	0.7	6.8	1/25	--	--	9.03	8.09b	112
Lakefork Mountain #2		Not Measured									
Lakefork Mountain #3	1/25	21	4.0	0.5	4.3						
Lightning Lake (A)	1/27	60	16.8	--	--						
Mosby Mountain	1/25	25	4.8	1.2	6.5	1/25	--	2.03a	7.13	7.18a	99
Paradise Park	1/25	25	7.5	1.0	8.4	1/25	--	2.42b	7.15	10.72b	67
Rock Creek Ranch	1/25	20	4.6	0.9	--	1/25	--	--	7.90	--	--
Strawberry Divide	1/30	51	16.0	2.6	11.4						
<u>PRICE RIVER</u>											
Dry Valley Divide	1/25	36	9.5	1.4	6.5						
Gooseberry Reservoir	1/27	54	16.4	1.7	10.9	1/27	6.05	3.07	17.49	11.06	158
Jones Ranch	1/25	22	5.0	0.5	4.1						
Mud Creek	1/25	47	11.4	1.1	8.4	1/25	4.30	2.30	12.25	8.86	138
White River #1	1/24	40	10.0	1.9	--	1/24	3.35	--	11.15	--	--

SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	THIS YEAR			PAST RECORD		PRECIPITATION (Inches)					
	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)		CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
				Last Year	Average †	Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>PRICE RIVER (Cont'd)</u>											
White River #2	1/24	33	7.6	1.5	--						
White River #3	1/24	30	9.2	1.3	--						
<u>SAN RAFAEL RIVER</u>											
Buck Flat	1/25	46	12.9	2.9	9.6b	1/25	4.80	--	14.55	10.32	141
Huntington-Horseshoe	1/27	67	21.2	3.5	--						
Orange Olsen	1/25	21	5.0	0.0	--	1/25	3.00	--	5.55	--	--
Red Pine Ridge	1/25	44	12.0	2.5	10.2b	1/25	5.30	--	16.13	12.40	130
Rush Pond	1/25	44	11.0	2.0	8.3b						
Seeley Creek R.S.	1/27	41	12.2	1.0	--	1/27	5.90	--	--	--	--
Stuart R.S.	1/25	31	7.7	0.5	--	1/25	3.95	--	10.25	--	--
Upper Joe's Valley	1/25	36	9.0	1.6	6.0b						
Wrigley Creek	1/25	35	9.0	1.7	6.5						
<u>MUDDY RIVER</u>											
Black's Fork	1/25	42	11.4	2.4	--						
Dill's Camp	1/25	42	11.2	1.6	--	1/25	4.55	--	12.83	--	--
<u>FREMONT RIVER</u>											
Black's Flat-U.M. Creek	1/30	34	9.4	2.1	--	1/30	3.95	--	10.37	--	--
Fish Lake	1/30	23	6.4	1.3	--	1/30	3.40	1.29	8.10	5.76	141
Johnson Valley	1/30	25	6.8	1.0	--						
<u>SOUTHEASTERN UTAH DRAINAGES</u>											
Buckboard Flat	1/30	25	6.8	1.6	--	1/30	3.99	--	7.31	--	--
Camp Jackson	1/30	36	9.4	1.9	--	1/30	7.40	--	10.82	--	--
LaSal Mountain (lower)	1/31	32	8.0	0.8	--						
LaSal Mountain (upper)	1/31	45	11.6	2.4	--	1/31	5.70	--	11.82	--	--
Monticello City Park	1/30	14	4.7	0.0	--						
<u>ESCALANTE RIVER</u>											
Widtsoe-Escalante Summit	1/27	20	5.1	0.6	4.0						
Widtsoe-Escalante #2	1/27	20	4.5	0.6	5.4						
Widtsoe-Escalante #3	1/27	26	5.6	1.4	6.6b	1/27	3.95	1.28	7.34	7.84	94
<u>VIRGIN RIVER</u>											
Kolob-Crystal	1/26	44	10.9	3.4	--						
Long Valley Junction	1/26	28	6.9	1.2	3.0						
Webster Flat	1/26	44	12.3	3.6	10.1	1/26	7.80	3.25	12.00	11.75	102
a - Partly Estimated b - Average of all past record - less than 15 years + - 1958-72 15 year average period (A) - Aerial Marker Reading e - Estimated											

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INDEX TO UTAH, BEAR & UPPER COLORADO RIVER BASINS

GREAT BASIN DRAINAGE

NO	STATE	NAME	SEC.	TWP	RGE	ELEV.	NO	STATE	NAME	SEC.	TWP	RGE	ELEV.	
UPPER BEAR RIVER (above Harer, Idaho)														
10G11	W	81g Park	7	27N	117W	8,700	11J41P	U	Lamb's Canyon #2	21	1S	3E	7,400	
10J6P	W	Burt's-Miller Ranch	19	3N	10E	7,900	12I3P	U	Middle Canyon	8	4S	3W	7,000	
10G7	W	CCC Camp x	9	29N	118W	7,500	11J44	U	Mill Creek	32	1S	3E	6,500	
10J36P	U	Gold Hill	11	1N	9E	10,000	11J10	U	Mill D South Fork	18	2S	3E	6,400	
10J37P	U	Hayden Fork	25	1N	9E	9,400	12I1P	U	Rocky Basin-Settlement Canyon	30	4S	3W	8,900	
10G12	W	Kelly Ranger Station	13	26N	118W	8,200	11J16P	U	Silver Lake (Brighton)	35	2S	3E	8,725	
10G17S	W	Labarge Guard Station x	7	30N	116W	9,000	12K1PST	U	Snow Bird (Gad Valley)	18	3S	3E	10,000	
10J35P	W	Lily Lake	34	2N	10E	9,300								
11H12PST	U	Monte Cristo R.S.	4	8N	4E	8,960								
10G10	W	Piney Labarge	19	29N	114W	8,820								
10G6	W	Poison Meadows x	29	30N	116W	8,500								
10G8P	W	Salt River Summit x	32	29N	118W	7,900								
10G13MP	W	Snyder Basin x	15	29N	115W	8,400								
10J17P	U	Stillwater Camp	32	2N	10E	8,550								
LOWER BEAR RIVER (below Harer, Idaho)														
11H37PST	U	Bug Lake	18	11N	5E	7,950	12M5PST	U	High-Top Mountain	24	38S	7W	7,700	
11H36P	U	Bunchgrass	5	13N	3E	8,400	11L9P	U	Kimberly Mine	11	27S	5W	9,300	
11G11	U	Christensen Ranch	27	13S	41E	5,600	12M6P	U	Midway Valley	26	37S	9W	9,800	
11H38P	U	Cinnamon Creek	5	8N	3E	7,300	12M7P	U	Panguitch Lake	4 & 5	36S	7W	8,200	
12H1P	U	Clarkston Mountain	29	14N	2W	6,300	12M19	U	Rainbow Point	29	38S	4W	9,100	
11G12	U	Cule River Ranger Station	13	13S	41E	5,400	12L5	U	Sagebrush	3	27S	3W	9,300	
11G13	U	Dry Basin	30	13S	42E	7,900	11M4P	U	Widsoe R.S.	22	34S	2W	7,600	
11G14	U	Dry Creek Flat	31	13S	37E	6,350								
11G15	U	Emigrant Summit	21	12S	42E	7,350								
11G6	U	Emigration Canyon (mouth)	24	12S	42E	7,350								
11G7	U	Franklin Basin	1	16S	41E	8,000								
11G8MPST	U	Garden City Summit	34 & 35	14N	4E	7,600	11K13P	U	Beaver Dam	27	19S	3E	8,000	
11H7MP	U	George Peak	4	13N	4W	9,000	11L1PST	U	Canoworth Lake	27 & 33	23S	2E	9,900	
13H4PST	U	Herd Hollow	4	11N	3E	7,000	11K10P	U	G. B. R. C.	26 & 27	17S	4E	10,000	
11H40P	U	Horsehoe Basin	31	13S	42E	8,000	11L2PST	U	Gooseberry R.S.	32	23S	2E	9,400	
11G15a	U	Klandike Narrows	10	14N	3E	7,400	11K3MPST	U	Manmoth R.S.-Cottonwood Creek	13	13S	5E	8,800	
11H13	U	Liberty Springs	7	13S	42E	8,240	11K34	U	Middle Fork	16	18S	4E	9,600	
11G13	U	Little Bear (lower)	15	8N	1E	6,000	11K12P	U	Mt. Baldy R.S.	19	19S	4E	9,500	
11H25PST	U	Little Bear (upper)	22	8N	1E	6,500	12K2P	U	Oak Creek	9	17S	3W	7,760	
12G5	U	Little Bear (upper)	22	13S	27E	6,200	11K3PPST	U	Pickle Keg Springs	4	21S	3E	9,600	
11G5	U	Slap Creek Divide	12	10S	44E	7,225	12L1PS	U	Pine Creek	24	22S	4W	8,700	
11H27	U	Steep Hollow #1	7	14N	3E	8,500	11K36	U	Rees's Flat	20	15S	2E	7,300	
11H28	U	Steep Hollow #2	9	14N	3E	7,700	12L11P	U	Shingle Mill	5	22S	3W	6,200	
11G9	U	Strawberry Creek	9	13S	41E	5,800	11K35	U	Thistle Flat	23	18S	3E	8,500	
11G10	U	Strawberry Mink Divide	14	13S	41E	6,800	BEAVER RIVER							
11H2PST	U	Tony Grove Lake	5	13N	3E	7,400	12L13	U	Beaver Race Track	23	29S	7W	6,020	
11H3MP	U	Tony Grove Ranger Station	11	13N	3E	6,250	12I9PST	U	Big Flat	18	29S	4W	10,290	
11G4P	U	Willow Flat	2	15S	41E	6,100	12I9PST	U	Merchant's Valley (upper)	8 & 9	29S	5W	8,200	
OGDEN RIVER														
11H14M	U	Beaver Creek-Skunk Creek	22	8N	3E	7,150	12L8	U	Other Lake	1	29S	5W	9,300	
11H8PST	U	Ben Lomond Peak	3	7N	1W	8,000								
11H9PST	U	Ben Lomond (lower)	1	7N	1W	6,000								
11H35P	U	Causey Dam	34	7N	3E	5,500								
LEGEND														
Numbering System (example)														
10J7	U	Snow Course Only	10J7	U	Snow Course Only	10J7	U	Snow Course Only	10J7	U	Snow Course Only	10J7	U	Snow Course Only
10J7a	U	Snow Course and Precipitation Gauge	10J7a	U	Snow Course and Precipitation Gauge	10J7a	U	Snow Course and Precipitation Gauge	10J7a	U	Snow Course and Precipitation Gauge	10J7a	U	Snow Course and Precipitation Gauge
10J7b	U	Snow Course and Aerial Photo	10J7b	U	Snow Course and Aerial Photo	10J7b	U	Snow Course and Aerial Photo	10J7b	U	Snow Course and Aerial Photo	10J7b	U	Snow Course and Aerial Photo
10J7c	U	Snow Course and Soil Moisture Station	10J7c	U	Snow Course and Soil Moisture Station	10J7c	U	Snow Course and Soil Moisture Station	10J7c	U	Snow Course and Soil Moisture Station	10J7c	U	Snow Course and Soil Moisture Station
10J7d	U	Snow Course and Soil Moisture Station	10J7d	U	Snow Course and Soil Moisture Station	10J7d	U	Snow Course and Soil Moisture Station	10J7d	U	Snow Course and Soil Moisture Station	10J7d	U	Snow Course and Soil Moisture Station
10J7e	U	Snow Course and Soil Moisture Station	10J7e	U	Snow Course and Soil Moisture Station	10J7e	U	Snow Course and Soil Moisture Station	10J7e	U	Snow Course and Soil Moisture Station	10J7e	U	Snow Course and Soil Moisture Station
10J7f	U	Snow Course and Soil Moisture Station	10J7f	U	Snow Course and Soil Moisture Station	10J7f	U	Snow Course and Soil Moisture Station	10J7f	U	Snow Course and Soil Moisture Station	10J7f	U	Snow Course and Soil Moisture Station
10J7g	U	Snow Course and Soil Moisture Station	10J7g	U	Snow Course and Soil Moisture Station	10J7g	U	Snow Course and Soil Moisture Station	10J7g	U	Snow Course and Soil Moisture Station	10J7g	U	Snow Course and Soil Moisture Station
10J7h	U	Snow Course and Soil Moisture Station	10J7h	U	Snow Course and Soil Moisture Station	10J7h	U	Snow Course and Soil Moisture Station	10J7h	U	Snow Course and Soil Moisture Station	10J7h	U	Snow Course and Soil Moisture Station
10J7i	U	Snow Course and Soil Moisture Station	10J7i	U	Snow Course and Soil Moisture Station	10J7i	U	Snow Course and Soil Moisture Station	10J7i	U	Snow Course and Soil Moisture Station	10J7i	U	Snow Course and Soil Moisture Station
10J7j	U	Snow Course and Soil Moisture Station	10J7j	U	Snow Course and Soil Moisture Station	10J7j	U	Snow Course and Soil Moisture Station	10J7j	U	Snow Course and Soil Moisture Station	10J7j	U	Snow Course and Soil Moisture Station

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH (above Duchesne River)													
9J11aP	U	Ashley Twin Lakes	20	1S	19E	10,500	13H2aP	U	Gleair Creek Meadows	26	14N	14W	9,050
10J21P	U	Black's Fork G.S.-East Fork	25	2N	12E	9,300	13H4P	U	Gleair Creek	13N	14N	4W	9,

Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

U.S. Department of Agriculture
Soil Conservation Service
Forest Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

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